NICOLAI HERMANN

• DETAILS •

F-Mail

hermann.nicolai@googlemail.com

Date of birth 16.11.2000

Driving license Class B

• LINKS •

GitHub

LinkedIn

• SKILLS •

Ability to Work Under Pressure

Python

Weights and Biases

PyTorch & Tensorflow/Keras

SLURM

Typescript/ Javascript

C#/C++/C

R / Java

• LANGUAGES •

German (Native)

English (Fluent)

Italian (Beginner)

PROFILE

My fascination with computer vision spans from understanding brain perception to the art of reconstructing 3D scenes from point clouds. This passion inspires my commitment to exploring and pushing the boundaries of computer vision technology.

EDUCATION

MSc Artificial Intelligence, USI (Summa cum laude, 9.66 CGPA)

Lugano, Switzerland

September 2022 — present

Master's thesis on reinforcing the quality of 3D Gaussian Splatting in areas that lack a strong supervision signal.

Focus: Computer Vision, Deep Learning, Image and Video Processing, Machine Learning.

MSc Artificial Intelligence (Exchange), ETH Zurich

Zurich, Switzerland

September 2023 — February 2024

Focus: Autonomous Cars, Computer Vision and Pattern Recognition, Probabilistic Al.

BSc Cognitive Science, University of Osnabrück (9.0 CGPA)

Osnabrück, Germany

September 2019 — August 2022

Focus: Artificial Intelligence, Computer Science, Neurobiology, Neuroinformatics, Psychology.

WORK EXPERIENCE

Al and Systems Engineer at Aility GmbH

Lugano, Switzerland

January 2024 — May 2024

Developing a scalable solution to deploy object-tracking models on custom hardware with successful integration in a test facility.

Skills: Computer Vision, Object Detection & Tracking, Python, PyTorch.

Tutor for Machine Learning

Lugano, Switzerland

September 2022 — January 2024

Private tutoring of students in math, probability theory, neural network architectures, and reinforcement learning at university level.

Deep Learning Research Intern at Queen's University

Kingston, Canada

July 2022 — September 2022

Applied deep learning methods to predict tick-borne pathogens for in situ detection, and classifying phenological stages of herbarium records.

Skills: Imbalanced classification, LSTM, Pandas, Python, SLURM, TensorFlow, research, Weights and Biases.

Remote Unity Developer at Social Brain in Action Lab, Macquarie-University

October 2021 — December 2021

Developed a virtual reality (VR) study paradigm involving the robot Pepper and designed a new code architecture to refactor the large legacy codebase to enable minimal effort expansion for new study paradigms.

Skills: C#, inverse-kinematics, mathematical optimization, Python, software engineering, TensorFlow, Unity, VR, Weights and Biases.

ACHIEVEMENTS & EXTRA-CURRICULAR ACTIVITIES

Recipient of two scholarships from the Deutscher Akademischer Austauschdienst (DAAD)
October 2021, July 2022

Winner of the *AI for Climate Change Hackathon* at PIK FutureLabs

Potsdam, Germany
January 2021

Drummer and Percussionist currently at Landesblasorchester Baden-Württemberg

September 2004 — Present